

## **Drone Use Regulation**

## **Background**

In June 2014, the committee authorized a study to examine potential drone use regulation in the state. The study focus is on describing the current state of drone regulation, federally and in other states, and determining what, if any, regulatory actions the state should take to address stakeholder concerns regarding this emerging technology. This study partially follows up on the concerns raised about legislative efforts to implement drone regulation in the 2014 session.

Drone is the most common name used for unmanned aerial systems (UAS) or unmanned aerial vehicles (UAV). This class of vehicle refers broadly to any unmanned, powered aircraft that sustain flight through remote operation or autonomous control.

In 2011, the Federal Aviation Authority (FAA) estimated that as many as 30,000 drones would be owned and regularly operated by the year 2030. More recently, the FAA revised its estimate to predicting that 7,500 drones may be commercially used in the next five years. This downward revision reflects a definition of drone that excludes aircraft exclusively used for hobby or recreation and a far more limited time frame.

Study methods used to complete this update include reviewing relevant literature, including federal law, rules, regulations, and opinions, following ongoing developments in the drone industry and drone regulation, and reviewing the regulatory efforts put in place in other states. Interviews were conducted with key stakeholders, including consultations with multiple state agencies and representatives of stakeholder groups (e.g., local law enforcement, drone users, privacy rights organizations).

## **Main Points**

The FAA Modernization and Reform Act of 2012 sets federal policy regarding drone use and regulation and directs the FAA to "develop a plan to accelerate the safe integration of unmanned aircraft systems into the national airspace system" no later than September 30, 2015.

The federal distinction between drones and model aircraft is problematic, as the same aircraft can be considered model aircraft or not depending on the use, user, or location of the drone in proximity to the user. Model aircraft are exempt from most FAA regulation, while non-model aircraft and their users are subject to FAA certification requirements. The 2012 definitions include requirements that model aircraft are "flown strictly for hobby or recreational use," "operated in accordance with a community-based set of safety guidelines," and weigh less than 55 pounds. This definition strictly excludes those drones used for commercial or monetary purpose from the model aircraft exemption.

Jurisdiction over drones generally belongs to the FAA, which oversees all flight in the national airspace, as well as certification of all non-governmental aircraft and aircraft operators. States have authority to place restrictions on use or users of governmental aircraft.

Twenty states have enacted drone-related laws, while at least 43 states have considered some drone legislation since the beginning of 2013. Twelve states have drone laws with provisions pertaining to lawenforcement restrictions, most of which require a warrant to authorize drone use, except in the case of emergencies. Seven states have instituted laws that criminalize some use of drones, typically for use of drones for non-governmental surveillance. Two states have placed moratoriums on government use of drones until mid-2015, with some exceptions.

The primary concerns of drone use are privacy and safety issues, which can, at times, be at odds with one another. Stakeholders indicate there are economic benefits of drone use and are concerned about how regulation might lessen any potential positive economic impact.

## Next Steps

Program review staff will continue to monitor developments at the federal level and gather information on stakeholder concerns in the state. Staff will develop further description of the regulations put in place in other states, including an analysis of:

- 1. the concerns addressed by regulations in other states;
- 2. how well those concerns were addressed;
- 3. any measureable impact as a result of the regulations; and
- 4. the extent to which the concerns and remedies used elsewhere are applicable within the state of Connecticut.